

Work Order ID 82606

82606

Page 1

April-03-12 11:22:02 AM

Item ID: D4593-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Base

Start Date: 4/03/12 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 4/03/12 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: *W*

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4593

A

100

0.00

100

BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blank: 1.00" x 2.500" x 4.120" long

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

HAAS I

Memo

0.00

HAAS CNC vertical machine #1

Machine D4495-1 as per Folio FB092 and Dwg

Dwg Rev: _____

FOLIO REV: _____

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

*all checked
w/o 80080*

Work Order ID 82606

82606

Page 2

April-03-12 11:22:02 AM

Item ID: D4593-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Base

Stop

NS2

Start Date: 4/03/12

Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/03/12

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

150

Fire Red(Ref:4.3,5,10) per QSI005 4.3

0.00

150

Powdercoat

Memo

0.00

Powder Coating

START TIME: _____ OVEN TEMPERATURE: _____
FINISH TIME: _____

Work Order ID 82606***82606***

Page 3

April-03-12 11:22:02 AM

Item ID: D4593-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Base

Start Date: 4/03/12

Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/03/12

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: _____

0.00

170

Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

MCS 12/04/04

W 1204.03

Picklist Print

April-03-12 11:22:01 AM

Page 1

Work Order ID: 82606

Parent Item: D4593-1

Parent Item Name: Base

Start Date: 4/03/12

Required Date: 4/03/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 12-02-27 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X02.500 6061-T6 Bar 1.00 x 2.50		Purchased	No				f	15.4200		0.356			

Location

Loc Qty

Loc Code

MAT003

15.42

114993

15.42

D4595-1

80080

W

Work Order ID 80080

(82606)

80080

Page 1

February-09-12 1:34:18 PM

Item ID: ~~D4595~~ D4593-1 9/12.02.16 Accept

Revision ID:

Item Name: Base

Start Date: 09/02/2012 Start Qty: 1.00 *1*

Required Date: 23/02/2012 Req'd Qty: 1.00 *1*

Reference:

Approvals: Process Plan: M.C.J. Date: 12/02/09 Tooling:

QC: Date: SPC (Y/N):

* Setup Start *NS1*

Stop *NS2*

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4595	A

100 0.00

100

Bandsaw Memo 0.00

Jeaspa Bandsaw Cut blank: 1.00" x 2.500" x 4.120" long

SL 12-02-14

①

110 0.00

110

HAAS 1 Memo 0.00

HAAS CNC vertical machine #1 Machine D4495-1 as per Folio FB092 and Dwg

SL 12-02-15

Dwg Rev: A
FOLIO REV: AA

120 0.00

120

QC Memo 0.00

Quality Control

SL 12-02-15

QC 21
enter
week
14
SCANNED 10/14 APR 14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80080

February-09-12 1:34:18 PM

80080

Page 2

Item ID: D4595-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Base
 Start Date: 09/02/2012 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 23/02/2012 Req'd Qty: 1.00 *1* Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.00							
Quality Control									

140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									

150	Fire Red(Ref:4.3.5.10) per QSI005 4.3	0.00							
150									
Powdercoat	Memo	0.00							
Powder Coating									

START TIME: 3:30 OVEN TEMPERATURE:
 FINISH TIME: 4:00

W113645

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

80080

Page 3

N900040100

Setup Start *NS1*

Stop ***NS2***

Reference:

Run Start *NR1*

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	--------------	---------------	---------------	------------------	----------------

0.00

0.00

Quality Control

0.00

0.00

Packaging

0.00

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February-09-12 1:34:23 PM

Page 1

Work Order ID: 80080

80080

Parent Item: D4595-1

D4595-1

Parent Item Name: Base

Start Date: 09/02/2012

Required Date: 23/02/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 12-02-09 JLM VERIFIED BY :DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X02.50 0		Purchased	No				f	15.7800		0.356			

M6061T6B1 000X02 500

6061-T6 Bar 1.00 x 2.50

**

12-02-14

Location

Loc Qty

Loc Code

MAT003

15.78

114993

15.78

36

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

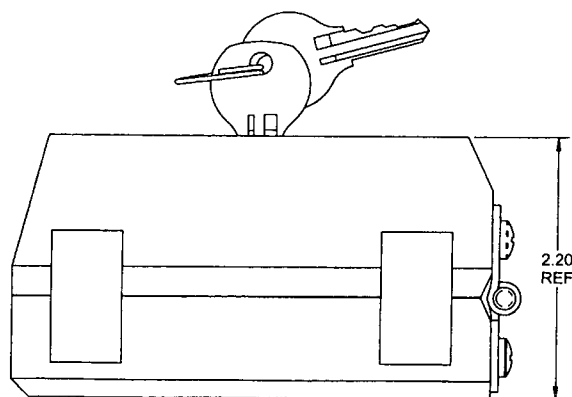
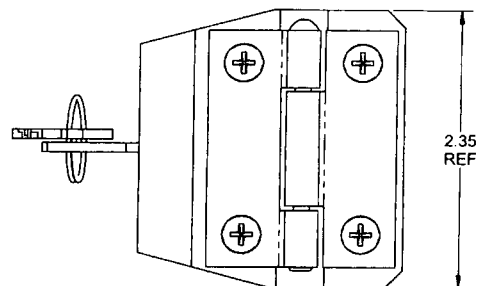
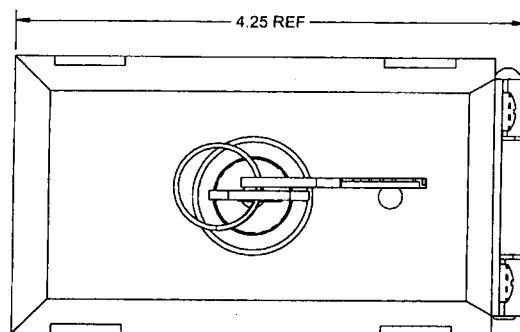
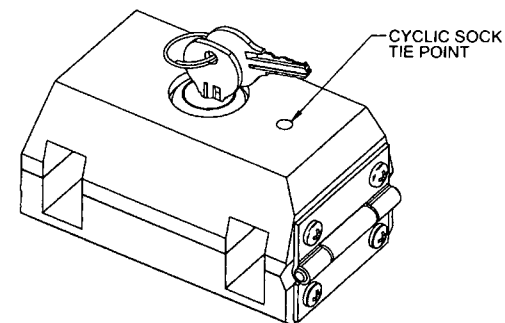
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	QTY -051	P/N	DESCRIPTION
	X		D4595-041	TAIL ROTOR DISABLING KIT
	1	X	D4595-051	PEDAL LOCK
	1		D3384-041	CYCLIC SOCK
	1		HX-81	SCREW, SKT-HD
	2		AN960-416	WASHER FLAT
1		1	D3373-5	CAM LOCK ASSEMBLY
2		1	D3385-3	HINGE
3		1	D4595-1	BASE
4		1	D4595-3	COVER
5		5	MS51957-41	PH-HD SCREW, #8
6		2	97395A461	DOWEL PIN (MCMASTER CARR)

80080 M.C.J
12/02/09



D4595-051 PEDAL LOCK

RELEASED
2012-07-02

A	NEW ISSUE	RP	12.01.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RP		
CHECKED	MP	DRAWING NO.	REV. A
MFG. APPR.		D4595	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	PEDAL LOCK ASSEMBLY	NTS
DATE	12.01.30	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

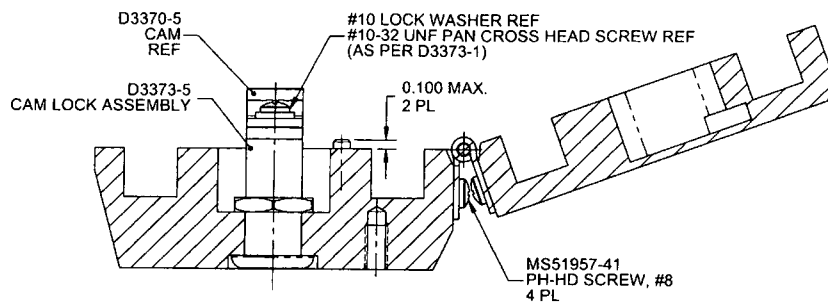
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

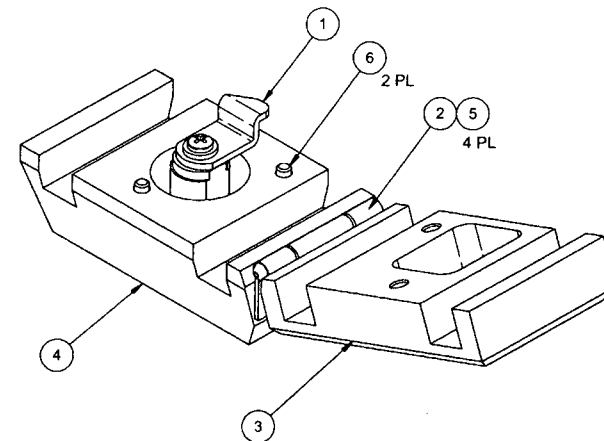
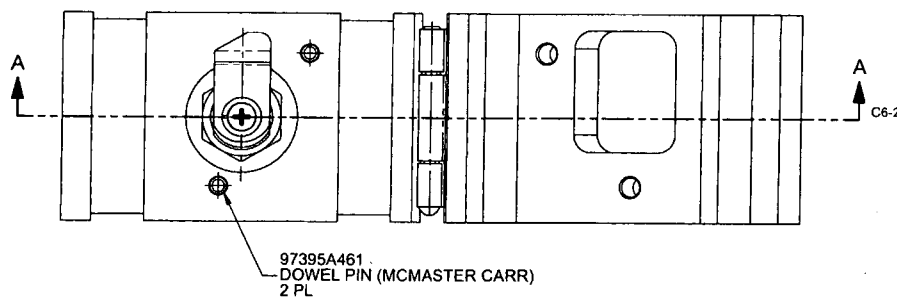
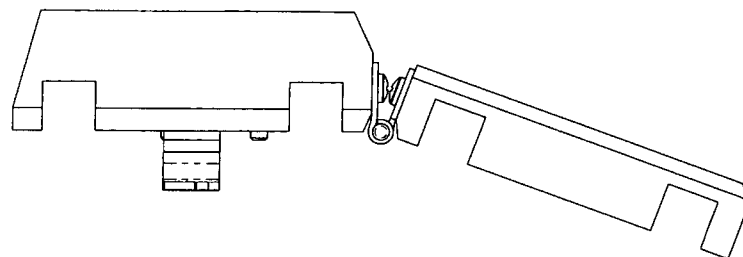
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

80080



SECTION A-A B4-2



- NOTES:**
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: 0.75 lbs

D4595-051 PEDAL LOCK ASSEMBLY

RELEASED
 2012-02-02

DESIGN	RP	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MP	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4595	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	PEDAL LOCK ASSEMBLY	NTS
DATE	12.01.30	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

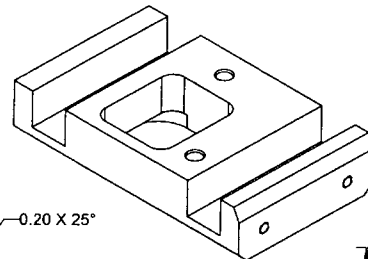
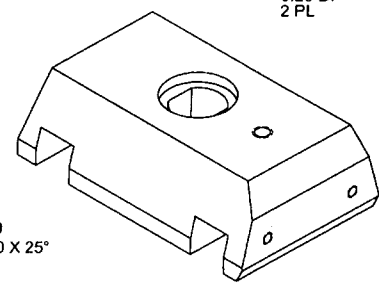
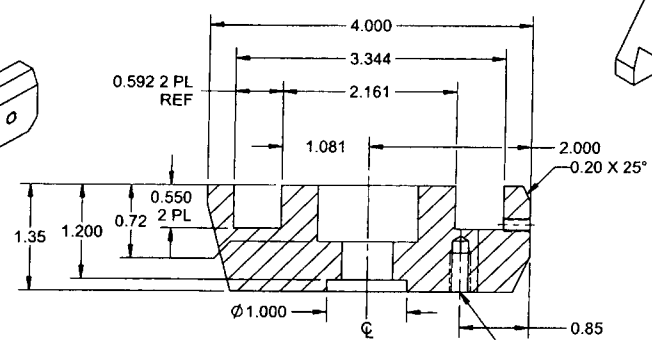
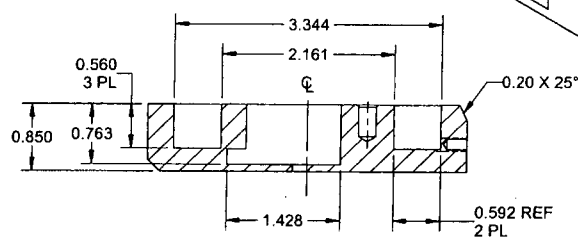
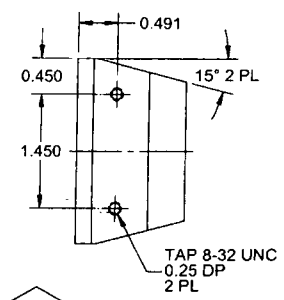
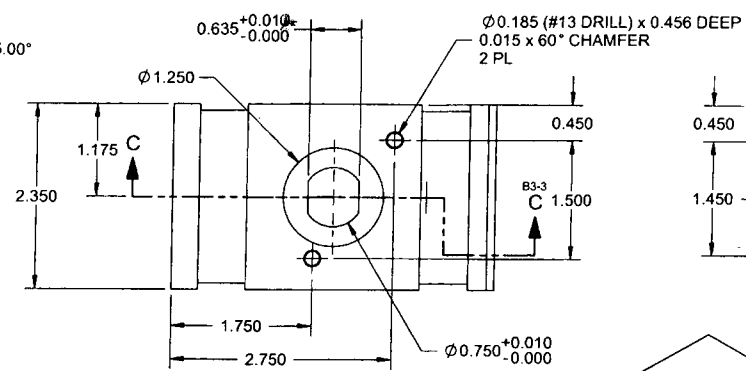
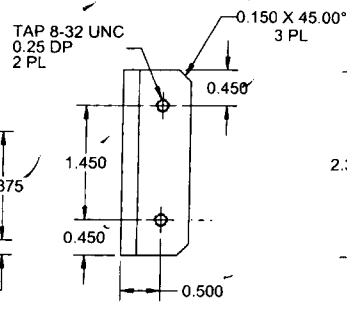
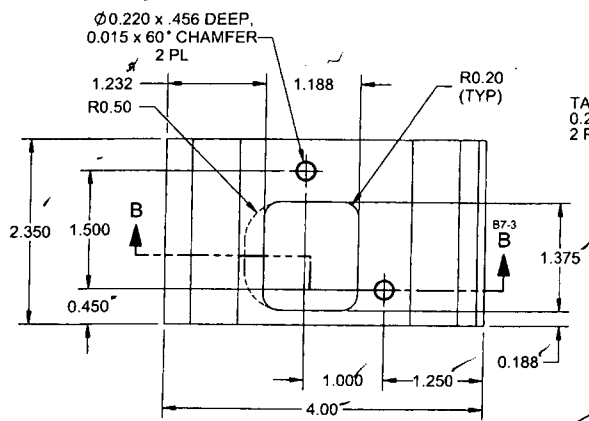
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

80080



SECTION B-B D7-3

SECTION C-C D3-3

DRILL $\phi 0.201 \times 0.625$ DEEP,
TAP 1/4-20 $\times 0.500$ MIN DEEP

D4593-1
9/2.02.16

D4595-1 BASE

D4595-3 COVER

RELEASED
2012-02-02

NOTES:

- 1) MATERIAL: 6061-T6/T651 PER QQ-A-200/8 OR QQ-A-225/8 OR ASTM B211 OR ASTM B221 REF. DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) MASK INSIDE HOLES PRIOR TO FINISH

DESIGN	RP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RP		
CHECKED	MP	DRAWING NO.	REV. A
MFG. APPR.		D4595	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		PEDAL LOCK ASSEMBLY	NTS
DATE	12.01.30	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 80080
Description: base		Part Number: D4595-1
Inspection Dwg: D4595 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø.220	+0.004 -0.006	.223	/		vern JL-1	
.456	±.010	.449	/		-	
1.232	±.010	1.230	/		-	
2.350	±.010	2.350	/		-	
1.500	±.010	1.499	/		H-G	
.450	±.010	.450	/		vern JL-1	
4.000	±.030	4.000	/		-	
1.000	±.010	1.000	/		H-G	
1.250	±.010	1.250	/		-	
.188	±.010	.188	/		vern JL-3	
1.375	±.010	1.376	/		-	
1.188	±.010	1.188	/		-	
8-32	/	/	/			
1.450	±.010	1.450	/		-	
.450	±.010	.450	/		-	
.500	±.010	.501	/		-	
.450	±.010	.450	/		-	
.150x45°	±.010 ±.5°	.150x45°	/		-	
3.344	±.010	3.344	/		-	
2.161	±.010	2.161	/		-	
.560	±.010	.559	/		-	
.763	±.010	.763	/		-	
.850	±.010	.851	/		-	

Measured by: JL	Audited by: amf	Preliminary Approval:
Date: 12-02-15	Date: 12/02/14	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

